

NODE=B170

 $\Xi_b^*(5955)^-$  $J^P = \frac{3}{2}^+$  Status: \*\*\* $\Xi_b^*(5955)^-$  MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>5955.33±0.12±0.05</b>	1 AAIJ	15H LHCb	$p\bar{p}$ at 7, 8 TeV
<sup>1</sup> Not independent of the mass difference measurement below. Observed in $\Xi_b^0\pi^-$ channel with $\Xi_b^0 \rightarrow \Xi_c^+\pi^-$ and $\Xi_c^+ \rightarrow pK^-\pi^+$ .			

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$$m_{\Xi_b^*(5955)^-} = m_{\Xi_b^0} = m_{\pi^-}$$

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>23.96±0.12±0.06</b>	2 AAIJ	15H LHCb	$p\bar{p}$ at 7, 8 TeV
<sup>2</sup> Observed in $\Xi_b^0\pi^-$ channel with $\Xi_b^0 \rightarrow \Xi_c^+\pi^-$ and $\Xi_c^+ \rightarrow pK^-\pi^+$ .			

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 $\Xi_b^*(5955)^-$  WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>1.65±0.31±0.10</b>	3 AAIJ	15H LHCb	$p\bar{p}$ at 7, 8 TeV
<sup>3</sup> Observed in $\Xi_b^0\pi^-$ channel with $\Xi_b^0 \rightarrow \Xi_c^+\pi^-$ and $\Xi_c^+ \rightarrow pK^-\pi^+$ .			

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 $\Xi_b^*(5955)^-$  DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \quad \Xi_b^0\pi^- \times B(\bar{b} \rightarrow \Xi_b^*(5955)^-)/B(\bar{b} \rightarrow \Xi_b^0)$	(20.7±3.5) %

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 $\Xi_b^*(5955)^-$  BRANCHING RATIOS

$\Gamma(\Xi_b^0\pi^- \times B(\bar{b} \rightarrow \Xi_b^*(5955)^-)/B(\bar{b} \rightarrow \Xi_b^0)) / \Gamma_{\text{total}}$	$\Gamma_1/\Gamma$
<b>0.207±0.032±0.015</b>	4 AAIJ
<sup>4</sup> Observed in $\Xi_b^0\pi^-$ channel with $\Xi_b^0 \rightarrow \Xi_c^+\pi^-$ and $\Xi_c^+ \rightarrow pK^-\pi^+$ .	

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 $\Xi_b^*(5955)^-$  REFERENCESAAIJ 15H PRL 114 062004 R. Aaij *et al.* (LHCb Collab)

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REFID=56376